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<p>(21) International Application Number: PCT/US92/09981 (22) International Filing Date: 18 November 1992 (18.11.92) (30) Priority data: 07/793,511 18 November 1991 (18.11.91) US 07/927,996 11 August 1992 (11.08.92) US (71) Applicant: E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US). (72) Inventors: FREUND, Kenneth, Stephen ; 215 Lake Terrace Drive, Hendersonville, TN 37075 (US). SOWELL, Lyles, Howard ; 381 Willow Bough Lane, Old Hickory, TN 37138 (US). WILSON, David, Eric ; 28 Wantaugh Avenue, Poughkeepsie, NY 12603 (US).</p>		<p>(74) Agents: SCHAEFFER, Andrew, L. et al.; E.I. du Pont de Nemours and Company, Legal/Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US). (81) Designated States: CA, JP, KR, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>
<p>(54) Title: METHOD OF OPENING FIBERS USING A MODIFIED DISPERSER PLATE</p> <div data-bbox="516 1171 1019 1644" data-label="Image"> </div> <p>(57) Abstract</p> <p>A method is disclosed for opening fibers. Preferably, the fibers are opened in the high speed production of uniform, light-weight webs by air-laydown of textile fibers. In a preferred embodiment, a rotating toothed disperser roll is used to open and doff fibers into an air stream of high uniform velocity and low turbulence to form a thin fiber stream from which the fibers are deposited inweb form on a moving screen. A curved disperser plate shrouds the disperser roll and prevents premature doffing. By using a specific disperser plate having an exposed rib length between 0.01 to 0.20 inches and a rib spacing between 0.15 to 2.0 inches, web quality is dramatically improved due to the significantly lower number of defects remaining in the web as unopened fiber chips.</p>		

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